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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
00.767.124	01/22/2001	Gerald Oberschmidt	450117-02808	2119

01.14.2003 7590

FROMMER LAWRENCE & HAUG LLP 745 FIFTH AVENUE NEW YORK, NY 10151

EXAMINER KINKEAD, ARNOLD M

PAPER NUMBER ART UNIT

DATE MAILED: 01/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
• • • • • • • • • • • • • • • • • • •	09/767,124	OBERSCHMIDT ET AL.			
Office Action Summary	Examiner	Art Unit			
	Arnold M Kinkead	2817			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status					
1) Responsive to communication(s) filed on 23 (	<u> October 2002</u> .				
2a) This action is <b>FINAL</b> . 2b) ∑ Th	is action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims					
4) Claim(s) 1,2,4-12 and 14-20 is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6) Claim(s) <u>1,2,4-12, and 14-20</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9) The specification is objected to by the Examiner.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11)☐ The proposed drawing correction filed on	_ is: a)☐ approved b)☐ disapp	roved by the Examiner.			
If approved, corrected drawings are required in reply to this Office action.					
12) The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority document	ts have been received.				
2. Certified copies of the priority documents have been received in Application No					
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
a) ☐ The translation of the foreign language pro 15)☐ Acknowledgment is made of a claim for domes					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informa	ary (PTO-413) Paper No(s)			

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 2. Claims 1,2,4-12, and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hornak et al(GR 2324919 of record)

The reference by Hornak et al discloses a demodulator(see figures 12,18 and pp. 21-22) comprising a Local Oscillator means(127), mixer(123), and LPF(205,207); an

A/D converter is shown in figure 18. Inherently, <u>due to time sharing</u>, the control signal for the switch(135) is **two times** the symbol frequency of the digital input signal. Two serially arranged information parts are obtained from the A/D converter output. The method steps being inherent.

The reference by Hornak et al does not explicitly state the relationship, i.e. the offset between the modulated signal band center and local oscillator center frequency, however, due to the similar structure and endeavor as noted above, and the description on page 22 of the reference it would have been recognized that such an offset relationship exists in order to make the circuit operate as intended. The local oscillator frequency is shifted with respect to the center frequency of the signal band.

In light of the above it would have been obvious to one of ordinary skill in the art to have recognized that the same structure and endeavor as applicants is provided for by the Hornak et al reference and that there exists an offset between the LO center frequency and the signal band center frequency to take advantage of the time sharing circuit construct.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnold M Kinkead whose telephone number is 703-305-3486. The examiner can normally be reached on Mon-Fri, 8:30 am -5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on 703-308-4909. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7724 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Arnold M Kinkead
Primary Examiner
Art Unit 2817

Arnold Kinkead January 10, 2003